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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/717,332	11/20/2000	John R. Josephson	OSU1159-074D	5020

8698 7590 05/30/2003

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EXAMINER

HIRL, JOSEPH P

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 05/30/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/717,332

Applicant(s)

JOSEPHSON ET AL.

Examiner

Joseph P. Hirl

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

### **DETAILED ACTION**

1. Claims 1-91 are pending in this application.
2. The claims and only the claims form the metes and bounds of the invention. The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

### ***Drawings***

3. The drawings are objected to because of the following:

Fig.1 contains notations that are too small to read.

Figs. 4-23 are identified in the specification, pages 6 and 7 and use in the respective text of the specification. Figs. 4-23 are missing from the disclosure.

These objections must be corrected.

### ***Oath/Declaration***

4. It does not identify the citizenship of each inventor. The citizenship of Naresh Sundaram Iyer has been omitted.

***Specification***

5. The specification is objected to because of the following:

Page 8, the related references to Fig. 1 need to be changed to properly relate to Fig. 1.

Page 8, line 22: perhaps "along" should be "among".

Page 10, lines 4 –13: Fig. 2 has no relevance.

Page 10, lines 14-22: While Fig. 3 is a scatterplot, it has no relevance to the substance of this section.

Specification in total: When the Figs. 4-23 are located, the related text should be check for relevance.

These objections must be corrected.

***Claim Rejections - 35 USC § 112***

6. Claims 18, 23-35, 36, 47-53, 54-63, 67-71, 89-91 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. Various omitted elements in the subject claims but required per the specification, page 5, lines 15-16 are Seeker, Filter and Viewer.

7. Claims 22, 51, 69 and 86 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s)

contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Figs. 4-23 that generally deal with scatterplots are missing from the disclosure. Further, those figures that are provided are inappropriately coupled by reference to the specification. Further, multiple colored figures are not enabled by the specification. Conclusion is confusion.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

9. Claims 1-91 are rejected under 35 U.S.C. 102(e) as being anticipated by Amado (U.S. Patent 5,701,400, referred to as **Amado**).

**Claims 1, 72**

Amado anticipates a seeker for acquiring a plurality of candidates (**Amado**, col 32, lines 4-5); a filter for selecting a subset of candidates from said plurality of candidates (**Amado**, col 32, lines 6-7; Examiner's Note (EN); filtering is selection which can be done by classifying, clustering, rules, etc.); and a viewer for displaying said subset of candidates and enabling narrowing of said subset of candidates (**Amado**, col 2, lines 13-19).

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**Claims 2, 23, 38, 55**

Amado anticipates seeker acquires said plurality of candidates by retrieving said plurality of candidates from a database (**Amado**, col 32, lines 4-5).

**Claims 3, 24, 39, 56, 75**

Amado anticipates seeker acquires said plurality of candidates by generating said plurality of candidates using components from a device library (**Amado**, col 32, lines 18-31; EN: Devices in a library equates to data stored in a database).

**Claims 4, 25, 40, 57, 76**

Amado anticipates device library comprises components, component behaviors, and composition schemes (**Amado**, col 32, lines 18-31; EN: Data, "...diagnosis, planning, design and process control..." are equivalent).

**Claims 5, 26, 41, 58, 77**

Amado anticipates components are defined by using a functional and compositional modeling language (**Amado**, col 10, lines 14-34; EN: The software used by KADS Tool which is a high end CASE tool is functional and compositional as represented by the KADS Tool models).

**Claims 6, 27, 42, 59, 78**

Amado anticipates device library supports composition of a device without reference to a specific environment (**Amado**, col 10, lines 14-34; EN: "...generates reusable models in a language-independent manner").

**Claims 7, 28, 43, 60, 79**

Amado anticipates device library supports composition of a deployed Device (**Amado**, col 10, lines 14-34).

**Claims 8, 29, 44, 61, 80**

Amado anticipates seeker acquires candidates using an FCML simulator (**Amado**, col 10, lines 14-34; ; col 32, lines 4-5; EN: Models provide simulation).

**Claims 9, 30, 45, 62, 81**

Amado anticipates FCML simulator is adapted to answer questions about candidates (**Amado**, col 10, lines 14-54).

**Claims 10, 31, 46, 63**

Amado anticipates seeker uses distributed computation to evaluate a large number of candidates (**Amado**, Fig.1).

**Claims 11, 32, 47, 65, 82**

Amado anticipates filter is selected from the group consisting of classical dominance filter, strict dominance. filter, superstrict dominance filter, selective superstrict dominance filter, discernible difference dominance filter, two-pass toleranced filter, and onionskin filter (**Amado**, col 15, lines 17-53; EN: Rough sets classify and hence are equivalent to filtering; Applicant's various filters are the equivalent of classification rules for classifying into two or more categories wherein a specific filter name is not novel).

**Claims 12, 33, 48, 66, 83**

Amado anticipates said filter uses a toleranced dominance method to select said subset of candidates (**Amado**, col 15, lines 17-53; EN: Rough sets classify and hence are equivalent to filtering; Applicant's various filters are the

equivalent of classification rules for classifying into two or more categories wherein a specific filter name is not novel).

**Claims 13, 20, 49, 67, 84**

Amado anticipates viewer is adapted to use a multi-attribute display (**Amado**, col 2, lines 13-19).

**Claims 14, 21, 50, 68, 85**

Amado anticipates viewer is adapted to display a trade-off scatterplot of said subset of candidates (**Amado**, col 16, lines 57-65; EN: DVT has a full graphics package which would include x-y plots and scatterplots).

**Claims 15, 22, 51, 69, 86**

Amado anticipates said viewer is adapted to display a first selected region of candidates from a first scatterplot in a first color, a second selected region of candidates in a second scatterplot in a second color, an intersection between said first selected region and said second selected region in a third color, and unselected candidates in a fourth color (**Amado**, col 16, lines 57-65; EN: DVT has a full graphics package which would include color scatterplots).

**Claims 16, 34, 52, 70, 87**

Amado anticipates plurality of candidates is designs for hybrid electric vehicles (**Amado**, col 17, lines 40-59; col 32, lines 4-18; col 31, lines 37-42; EN: Amado has a broad application and there isn't any feature in the design for hybrid electric vehicles that is novel to Amado).

**Claims 17, 35, 53, 71, 88**



Amado anticipates said plurality of candidates is selected from the group consisting of candidates for a design task, candidates for planning. task, candidates for a purchasing task, and candidates for alternative hypotheses (**Amado**, col 17, lines 40-59).

**Claim 18**

Amado anticipates a seeker for acquiring a plurality of candidates (**Amado**, col 32, lines 4-5); and a filter for selecting a subset of candidates from said plurality of candidates (**Amado**, col 32, lines 6-7).

**Claim 19**

Amado anticipates a viewer for displaying said subset of candidates and enabling narrowing of said subset of candidates (**Amado**, col 2, lines 13-19).

**Claim 36**

Amado anticipates filter for selecting a subset of candidates from a plurality of candidates (**Amado**, col 32, lines 6-7); and a viewer for displaying said subset of candidates and enabling narrowing of said subset of candidates (**Amado**, col 2, lines 13-19).

**Claim 37**

Amado anticipates a seeker for acquiring said plurality of candidates (**Amado**, col 32, lines 4-5).

**Claim 54**

Amado anticipates a seeker for acquiring a plurality of candidates (**Amado**, col 32, lines 4-5); a viewer for displaying and enabling narrowing of a

subset of candidates from said plurality of candidates (**Amado**, col 2, lines 13-19).

**Claim 64**

Amado anticipates a filter for selecting said subset of candidates from said plurality of candidates (**Amado**, col 32, lines 6-7).

**Claim 73**

Amado anticipates acquiring a plurality of candidates includes the step of retrieving said plurality of candidates from a database (**Amado**, col 32, lines 4-5).

**Claim 74**

Amado anticipates acquiring a plurality of candidates includes the step of evaluating a plurality of candidates using a seeker (**Amado**, col 32, lines 4-5).

**Claim 89**

Amado anticipates displaying candidates for a decision problem comprising the step of displaying on a screen a distribution of candidates along each criteria for said decision problem (**Amado**, col 2, lines 13-19).

**Claim 90**

Amado anticipates comprising the step of determining which candidates in any one of the criteria have been selected (**Amado**, col 31, lines 38-42).

**Claim 91**

Amado anticipates the step of performing intersections of different selections along different criteria (**Amado**, col 31, lines 38-42 EN: Intersections relate to commonality or synchronization among classifications or clustering).

**Conclusion**

10. Claims 1-91 are rejected.

**Correspondence Information**

11. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Follansbee can be reached at (703) 305-8498.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,  
Washington, D. C. 20231;

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

(703) 746-7240 (for informal or draft communications with notation of "Proposed" or "Draft").

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Hand-delivered responses should be brought to:

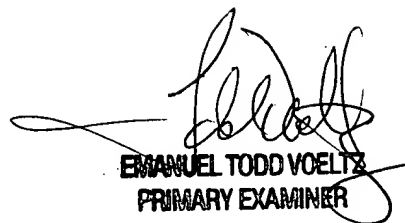
Receptionist, Crystal Park II

2121 Crystal Drive,

Arlington, Virginia.

Joseph P. Hirl

May 22, 2003



EMANUEL TODD VOELTZ  
PRIMARY EXAMINER